DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: STP-IM-180-1(6) Catoosa
P. I. No.: 621530-
I-75 @ S.R. 151 Interchange

OFFICE: Engineering Services

DATE: April 7, 2008

FROM: Brian K. Summers, P.E., Project Review Engineer REW

TO: Babs Abubakari, P.E., State Consultant Design and Program Delivery Engineer

SUBJECT: **IMPLEMENTATION OF VE STUDY ALTERNATIVE - REVISED**

A Value Engineering Study was performed on the above noted project in June 2007. Based on information that was available at the time of the VE Study, several VE Alternates were proposed that had significant cost savings associated with them. One of these VE Recommendations was "B-9". This VE Recommendation recommended MSE Abutment Walls be used to eliminate the two end spans on the bridge over I-75. The cost savings calculated for this VE Recommendation was $706,073 and was based on the assumption that staging could be accomplished without a significant amount of shoring. However, more detailed information in regards to the staging indicates that additional shoring would be required to construct the middle stage of the MSE Abutment Walls at each end of the bridge. In addition, there was a mathematical error in the original calculations. Taking into account the additional shoring this now results in a net increase of $10,036 over the original design.

For this reason, the Bridge Design Office recommends that approval be given to overturning the initial approval to implement "B-9" and this Office concurs. See attached information from the Bridge Design Office.

Approved: Del MR **Date:** 4/10/08
Gerald M. Ross, P. E., Chief Engineer

Approved: Richard Wayne Tedora **Date:** 4/29/2008
for **Rodney Barry, P.E., FHWA Division Administrator**

BKS/REW

Attachments

c: Gus Shanine, FHWA

Christy Poon-Atkins, FHWA
Todd Long
Paul Liles
Bill DuVall
Joe King
Kenny Beckworth
Ken Werho
Lisa Myers

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-IM-180-1(6) CATOOSA COUNTY
PI No.: 621530

OFFICE Atlanta, GA

DATE April 5, 2008

FROM Paul V. Liles, Jr., P.E, State Bridge Engineer

TO Brian K. Summers, P.E., State Plan Review Engineer

SUBJECT **VALUE ENGINEERING ALTERNATIVE**

Alternate B-9, as stated in the Implementation of Value Engineering Study Alternatives dated September 7, 2007, recommends using MSE abutment walls for the construction of the SR 151 bridge over I-75. The study estimates the potential cost savings for this alternative as $706,703. The Bridge Office has re-evaluated the estimate for this work and has determined that implementation of this alternative will result in an increase of $10,036 over the original design, see attached estimate. The change in estimate is primarily driven by the additional shoring required in order to construct the middle stage of the MSE abutment walls at each end of the bridge. In addition, the VE estimate for this alternative had a mathematical error of $314,820.

We respectfully request your reconsideration of Alternate B-9. Please advise the Bridge Office if it is acceptable to proceed with the design of the bridge not using MSE abutment walls. If you have any comments or concerns, please contact me or call Bill DuVall at (404) 463-0058.

PVL:WMD

Attachments

cc: Bill DuVall, Bridge Design

VE ALTERNATE

Stage I

SHORING = (32' H)(45'L + 55) (70 $/SF) = 64,000

MSE = (25'H)(40'L) (65 $/SF) = 65,000

TEMP. MSE = (32' H)(30'L + 17'L) (15 $/SF) = 22,560

STAGE II

MSE = (25'H)(50'L) (65 $/SF) = 81,250

MSE = (12'H)(50'L) (65 $/SF) = 39,000

STAGE III

MSE = (25'H)(50'L) (65 $/SF) = 81,250

MSE = (12'H)(50'L) (65 $/SF) = 39,000

ADDITIONAL MSE (FULL WIDTH)

ADD. MSE BACKFILL (7')(25')(130)(1/27)(185 $/CY) = 155,890

EXCAVATION (7')(25')(130)(1/27)(4.34 $/CY) = 3,657

WALL SUB-TOTAL 551,597

2 ABUTMENTS × 2 = 1,103,194

BRIDGE

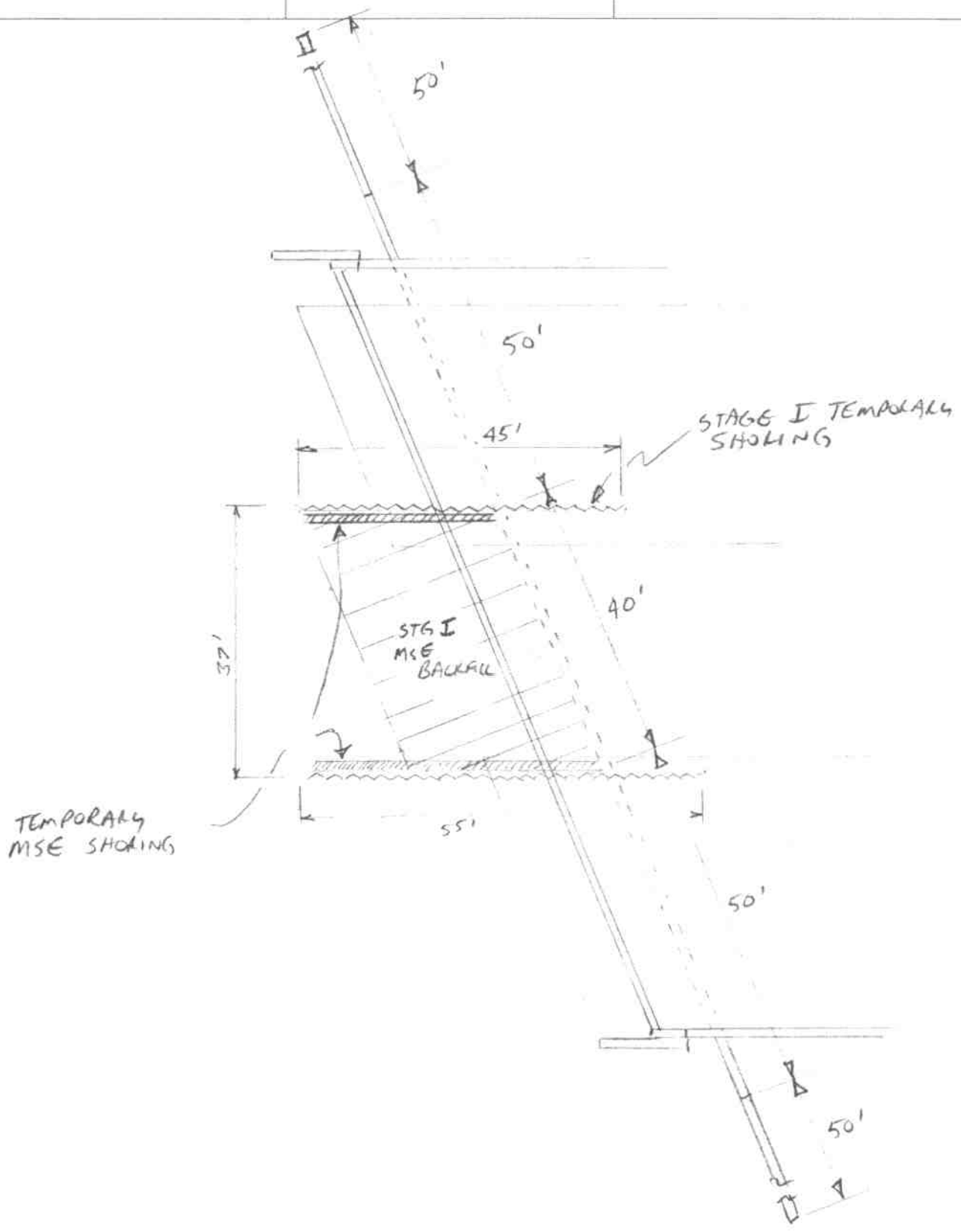
(229')(110.42)(100) = 2,517,576

3,620,770

ORIGINAL BRIDGE DESIGN

(327)(110.42)(100) = 3,619,734

-10,036



PRECONSTRUCTION STATUS REPORT

PROJ ID	COUNTY	DESCRIPTION	MGMT. ROW DATE	SCHED DATE	MGMT. LET DATE
621530-	Catoosa	SR 151 FM ROLLINS IND PK/HOLCOMB RD TO US 41 @ RINGGOLD	Nov-08	Nov-10	Jul-10

STPIM-0180-01(006) *FIELD DIST:* 6
TIP #: STP-98-2 *TWIN:* *US:*
MPO: Chattanooga TMA *EST DATE:* 11/15/07
MODEL YR: *2010*
PROJ MGR: Reid, Robert *PROJ LENGTH:* 2.03
PROG TYPE: Reconstruction/Rehabilitation *TYPE WORK:* Widening
CONCEPT: ADD 4R(MED 20) *LET RESP:* DOT

Phase	Approved	Proposed	Cost	Fund	Status
PE	1992	1992	240,500.00	33E	AUTHORIZED
PE	2003	2003	1,265,000.00	Q25	AUTHORIZED
ROW	2008	2008	2,812,000.00	L230S	PRECST
ROW	2009	2009	17,468,774.40	L240	PRECST
CST	2011	2011	21,587,000.00	L240	PRECST
CST	Congressional District 11	9	7,480,000.00	L230S	PRECST

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		Define Project Concept	11/1/96	1/10/97	100	CATOOSA
		Concept Meeting	7/1/97	7/1/97	100	
		Concept Submittal and Review	5/13/98	5/13/98	100	
		Receive Preconstruction Concept Approval	6/12/98	6/12/98	100	
		Management Concept Approval Complete	**7/23/98**	**9/15/98**	**100**	
		Revise or Re-validate Approved Concept	5/17/04	8/16/04	100	
		Value Engineering Study	4/13/07	9/17/07	100	
		Public Information Open House Held	1/31/08	1/31/08	100	
4/10/08	4/10/08	Environmental Approval	10/1/99		85	
		Mapping	5/26/99	6/3/99	100	
4/14/08	5/16/08	Field Surveys/SDE			0	
4/10/08	**4/10/08**	**Preliminary Plans**	**11/10/03**		**10**	
4/10/08	4/10/08	Preliminary Bridge Design	4/12/05		95	
5/7/08	5/6/08	Underground Storage Tanks	2/9/05		53	
7/4/08	11/21/08	404 Permit Obtainment			0	
5/2/08	5/5/08	PFPR Inspection			0	
6/10/08	9/1/08	R/W Plans Preparation			0	
10/28/08	**10/31/08**	**R/W Plans Final Approval**			**0**	
6/10/08	6/12/08	L & D Report Development and Approval			0	
11/3/08	9/13/10	R/W Acquisition			0	
3/26/09	4/8/09	Stake R/W			0	
		Soil Survey	5/16/05	9/7/05	100	
4/11/08	4/22/08	Bridge Foundation Investigation			0	
6/13/08	**2/20/09**	**Final Design**			**0**	
4/11/08	7/31/08	Final Bridge Plans Preparation			0	
4/11/08	4/14/08	FFPR Inspection	2/15/08		95	
4/28/08	5/9/08	FFPR Response			0	

BIKE PROVISIONS INCLUDED?: N *MEASUREMENT* E *CONSULTANT:* C *UT EST:* $ 1,138,000.00

PDD: Coor w/670710? 9/11/02. Needed per Comer 9/1/04. Much traffic - trucks & carpet mills 10/18/04
Bridge: IAB 11/01/06 CONSUL - B&L
Design: RLR LJ/CPA AGuzman -Preliminary Plans -Stp Wk Not 2/22 PKnow
EIS: CE|NotApvd|OnSchRW|Russett(2-18-08)
LGPA: CATOOSA SGN DO UTILITIES 6-24-03|RESCISSION LETTER SENT TO CATOOSA 3-8-05
Planning: IM FUNDS TO BE USED FOR RAMPS -- SEE 62Y530
Programming: PR2/PE=7-1-92|#1 4-01|#2 11-02|#3 10-04|#4 5-07
Railroad: NO
Traffic Op: AWAITING CONSULT PFPR PLNS FOR REVIEW 9/30/05 $
UST: NEED CONCEPT AND LAYOUT
Utility: SUE level B approved 1/13/05 - InfraMap
EMG: M1541/2004 (H85(94)-W/V88)TIES TO M1513;DOT=M/S;C=D

R/W INFORMATION:
PREL PARCEL CT: 50 *TOTAL PARCEL CT:* *ACQUIRED BY:* DOT *ACQ MGR:*
UNDER-REVIEW CT: *RELEASED* *OPT-PEND CT:* *DEEDS CT:* *COND-PEND CT:* *COND-FILED CT:*
RW CERT DT: *ACQUIRED CT:* *RELOCATION CT:*

F

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: STP-IM-180-1(6) Catoosa
P.I. No.: 621530
I-75 @ S.R. 151 Interchange

OFFICE: Engineering Services

DATE: September 6, 2007

FROM: Brian K. Summers, PE, Project Review Engineer

TO: Babs Abubakari, P.E., State Consultant Design and Program Delivery Engineer

SUBJECT: **IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES**

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
GENERAL SCOPE (G)				
G-1	Since there are four lanes in the Lafayette area, delete the segment of the project from Lafayette Street north to S.R. 41, including the South Chickamauga Creek Bridge. New project limits would be from Sta. 13+00 to Sta. 101+00. Eliminate the Right of Way in the Lafayette segment also.	$2,507,932	No	The project was extended for operational issues and to include the replacement of the South Chickamauga Creek Bridge.
G-4	Add empty conduits along S.R. 151 for future integration of the traffic lights.	Design Suggestion	Yes	This should be addressed during plan development.

ALT #	Description	Potential Savings/LCC	Implement	Comments
GENERAL SCOPE (G) - continued				
G-5	Add several overhead lights at the I-75 Interchange and other key intersections.	Design Suggestion	Yes	This should be done pending approval of Local Government Maintenance Agreement.
G-6	The ADT of 22,000 in the Design Year appears very high; research traffic volume numbers and recheck in the field, if possible.	Design Suggestion	Yes	This should be addressed during plan development.
ALIGNMENT (A)				
A-3	Reduce the amount of construction south of Holcomb Road; drop the southbound through lane on S.R. 151 at Holcomb Road. Grade out for sidewalks but do not pave.	$510,155	No	The additional work south of the intersection is necessary to provide the appropriate design speed taper from a two lane facility to a four lane facility with a raised median.
TYPICAL SECTION (C)				
C-1	Add curb and gutters to both sides of Old Alabama Road and reduce the Right of Way requirements in total on the west side of the road.	$733,140	Yes	This should be done.
C-9	Use grassed median in lieu of pavement. Maintenance costs should be managed by the City.	$105,245	No	Future Maintenance costs would minimize the cost savings.

ALT #	Description	Potential Savings/LCC	Implement	Comments
TYPICAL SECTION (C) - continued				
C-10	Reduce the section from 4 lanes to 3 lanes for Old Alabama Road south of Poplar Lane. Revisit the traffic projections to establish feasibility.	$4,493,474	No	Based on traffic volumes given to the Design Consultant, four lanes are required
RAMPS (R)				
R-1	Reduce the amount of fill required by realigning Ramp C to use the existing Ramp pavement, grading, and Right of Way. Reduce the taper by 900'. Defer major I-75 expansion improvements.	$899,706	No	The ramps were realigned to increase the spacing between the ramp termini. Additionally, the existing ramp grades exceed the maximum 4% allowed by FHWA.
R-2	Retain existing Ramp A pavement and grading. Defer improvements until I-75 is expanded. Do nothing now.	$1,420,385	No	The ramps were realigned to increase the spacing between the ramp termini. Additionally, the existing ramp grades exceed the maximum 4% allowed by FHWA.
R-4	Defer all improvements to the tapers on Ramps A, B, C, and D until the I-75 lane widening takes place.	$1,827,706 (proposed) $456,927 (revised cost savings – assumed 25%)	Yes	The taper lengths should be reduced; however, the ramps should still be separated as much as possible at the ramp termini.

ALT #	Description	Potential Savings/LCC	Implement	Comments
BRIDGES (B)				
B-1	Reduce fill depth and resulting Right of Way requirements by using four spans in lieu of three spans on the South Chickamauga Creek Bridge and reduce the superstructure depth by 1'-5".	$75,505	No	Results in a bent in or near the middle of South Chickamauga Creek.
B-5	Reuse the existing I-75 bridges since they are in serviceable condition. Jack the existing bridges to meet the 17' clearance requirements and widen as necessary.	$567,597	No	The GDOT Bridge Maintenance Office recommends this bridge be replaced.
B-6	Rehabilitate the existing South Chickamauga Creek Bridge instead of demo and total replacement. Expand the existing steel bridge as necessary to meet new requirements.	$392,994	No	The GDOT Bridge Maintenance Office recommends this bridge be replaced.
B-9	Use MSE Abutment Walls on the I-75 Bridge in lieu of slope paving and eliminate the two end spans on the bridge.	$706,073	Yes	This should be done.

ALT #	Description	Potential Savings/LCC	Implement	Comments
BRIDGES (B) – continued				
B-10	Reduce the median width on the South Chickamauga Creek Bridge from 20 ft. to 14 ft. to match the typical section median width of 14 ft.	$207,498	No	The 20 ft. median is proposed to match the future 20 ft. median on S.R. 151. The extra bridge width is needed during staging due to a grade change at this bridge.
CONSTRUCTION MANAGEMENT (CM)				
CM-1	Shift the alignment of Old Alabama Road entirely to the east and construct the project in two stages in lieu of four. Purchase Right of Way on the east side only.	$3,051,332	No	This would be a total redesign effort for S.R. 151 which would jeopardize the schedule for this project.
CM-2	Incorporate the "Economic Price Adjustment" clause into the bid documents (Federal Acquisition Regulation, Part 16) to share the risk of possible price escalation of materials such as Asphalt, fuel, steel, and concrete.	Design Suggestion	Yes	This is covered in GDOT Specifications with an Index for Asphalt and fuel.
CM-4	Add a line item to the project estimate for demolition of the two existing bridges. Demo costs could be $\$40/ft^2$ on each bridge for a total cost of $1 million.	Design Suggestion	Yes	This should be done.

ALT #	Description	Potential Savings/LCC	Implement	Comments
CONSTRUCTION MANAGEMENT (CM) - continued				
CM-6/7	Temporarily close Old Alabama Road at South Chickamauga Creek to allow faster construction of the new bridge. Use local surface streets to temporarily detour traffic around the site. Construct the bridge in 4 months in lieu of 8 months.	$300,000	No	This is not feasible since there are no local streets that could be used as a detour that would accommodate the additional traffic.

A meeting was held on September 6, 2007 and Adolfo Guzman and Joe Garland with Clark Patterson, Stanley Hill and Lowell James with Consultant Design and Brian Summers, Ron Wishon and Lisa Myers with Engineering Services were in attendance.

The results above reflect the consensus of those in attendance and those who provided input.

Approved: Gerald M Ross **Date:** 9/10/09
Gerald M. Ross, P. E., Chief Engineer

Approved: Gus Shanine **Date:** 9/19/07
for Rodney Barry, P.E., FHWA Division Administrator

BKS/REW

Attachments

c: Gus Shanine, FHWA
Todd Long

Lowell James
Joe King
Kenny Beckworth
Ken Werho
Lisa Myers

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-IM-180-1(6) Catoosa County
PI No.: 621530
SR 151/Old Alabama Road Widening

OFFICE Consultant Design

DATE August 9, 2007

FROM Babs Abubakari, P.E., State Consultant Design Engineer

TO Brian K. Summers, P.E., Project Review Engineer
Attention: Lisa Myers

SUBJECT VALUE ENGINEERING STUDY – FINAL REPORT RESPONSE

Below are the responses to the Value Engineering Study conducted on June 12-15, 2007 for the above reference project. Each comment was study and addressed by both the Department's Project Manager and the Consultant's Project Manager:

GENERAL SCOPE (G):

Value Engineering Alternative G-1 – End SR 151 at LaFayette Street.

COMMENTS: As outlined in the Concept Report dated February 9, 1998, the original scope of this project ended reconstruction of SR 151 just before Boynton Road/LaFayette Street. For traffic safety issues, the scope was revised to include the section of SR 151 from Boynton Road/Lafayette Street to US 41, as shown in the Revised Concept Report dated August 16, 2004.

The implementation of this Alternative is not recommended.

Value Engineering Alternative G-4 – Add empty conduits along SR 151 for the future integration of traffic lights.

COMMENTS: The plans supplied to the VE Study Team included signal interconnect plans (Sheets 28-01 to 28-04). The addition of empty conduits for future traffic lights will be discussed with GDOT and local officials during the Preliminary Field Plan Review.

The implementation of this design suggestion will be investigated further during detailed design.

Value Engineering Alternative G-5 – Add several overhead lights at the I-75 interchange and other key intersections.

COMMENTS: Under the existing conditions there is no roadway lighting along SR 151 or I-75 within the project area. According to the GDOT Design Policy Manual, "if no existing roadway lighting system is present, AND the site does not meet the AASHTO warranting conditions for roadway lighting, THEN a written request for lighting must come from the Local Government for the inclusion of roadway lighting to be included in a programmed GDOT project to be considered." According to the City Manager for the City of Ringgold, the Mayor and the City Council have agreed to light the I-75 interchange and agree to the energy and maintenance costs associated with the installation.

The implementation of this design suggestion is recommended.

Value Engineering Alternative G-6 – The ADT of 22,000 in the design years appears very high; research traffic volume numbers and recheck in the field if necessary.

COMMENTS: Existing and future traffic volumes were supplied by GDOT. GDOT will examine these counts to determine if they are still accurate.

The implementation of this design suggestion is recommended.

ALIGNMENT (A):

Value Engineering Alternative A-3 – Reduce the amount of construction south of Holcomb Road; drop southbound through lane on SR 151 at Holcomb Road.

COMMENTS: The scope of the project includes a four-lane section through the intersection of Holcomb Road/Rollins Industrial Boulevard. The additional construction to the south of the intersection is required in order to meet the design speed taper requirements from the existing two-lane section to the proposed four lane section at the intersection. In addition, the current design is for an unsignalized intersection. Based upon the traffic volumes, the side streets experience a high delay during the peak hour. Using a two-lane design for SR 151 instead of a one-lane design as suggested by VE Alternative A-3, the delay for the side streets decreases.

The implementation of this Alternative is not recommended.

TYPICAL SECTION (C):

Value Engineering Alternative C-1 – Add curb and gutter on SR 151 beginning at Sta. 13+00 to Sta. 74+00.

COMMENTS: According to the GDOT Area Engineer, this area is growing. There are a number of new developments and subdivisions along the project corridor which would benefit from the addition of curb/gutter with sidewalk.

The implementation of this Alternative is recommended.

Value Engineering Alternative C-9 – Replace median paving with grassing.

COMMENTS: Alternative C-9 would save money in construction costs due to the elimination of concrete paving and replacing it with grass or other landscape material. However, it is GDOT policy not to maintain such medians, and instead pass maintenance responsibilities on to the local government. The City of Ringgold would have to be in agreement with this, and according to the GDOT Area Engineer, it is not likely the City has the man-power or funds to do so.

The implementation of this Alternative is not recommended.

Value Engineering Alternative C-10 – Construct a three-lane section south of Poplar Springs and widen to the east.

COMMENTS: As noted in VE Alternative A-3, the need for a four-lane section was based upon the traffic volumes presented by GDOT. They show that a four-lane section is necessary at the intersection of Holcomb Road/Rollins Industrial Boulevard. As a result, SR 151 is designed as a four-lane section south of Poplar Springs Road.

The implementation of this Alternative is not recommended.

RAMPS (R):

Value Engineering Alternative R-1 – Realign Ramp C to reuse the existing pavement, grade, and right-of-way and reduce taper by approximately 900-ft.

COMMENTS: Ramps A and C were re-aligned to increase the spacing between the ramps on either side of the bridge over I-75. At the time the Concept Report was approved, the minimum required spacing for median openings was 660-ft. The ramps were relocated in order to meet this minimum as close as possible; however, due to site restrictions, they are spaced approximately 600-ft. apart. Under the existing conditions, they are spaced approximately 500-ft. apart.

In addition, the existing ramp grades exceeded the maximum 4-percent grades allowed by FHWA. Re-building the ramps eliminates this condition.

The implementation of this Alternative is not recommended.

Value Engineering Alternative R-2 – Retain Ramp A pavement and grading and defer improvements until I-75 is expanded.

COMMENTS: As noted in Alternative R-1, Ramps A and C were re-aligned to increase the spacing between the ramps on either side of the bridge over I-75. At the time the Concept Report was approved, the minimum required spacing for median openings was 660-ft. The ramps were relocated in order to meet this minimum as close as possible; however, due to site restrictions, they are spaced approximately 600-ft. apart. Under the existing conditions, they are spaced approximately 500-ft. apart.

In addition, the existing ramp grades exceeded the maximum 4-percent grades allowed by FHWA. Re-building the ramps eliminates this condition.

The implementation of this Alternative is not recommended.

Value Engineering Alternative R-4 – Defer all improvements for Ramps A, B, C, and D, until required by I-75 widening.

COMMENTS: The Ramps, as currently designed, meet the 70:1 taper that GDOT required during preliminary design. The ramps will be re-designed with a 50:1 taper to reduce the impacts. However, the ramp gore will be kept at the currently proposed location to accommodate the future four-lane section on I-75.

The partial implementation of this Alternative is recommended.

BRIDGES (B):

Value Engineering Alternative B-1 – Reduce the superstructure depth at the creek bridge by converting from a three-span to a four-span bridge with shallower members.

COMMENTS: The bridge over South Chickamauga Creek was designed in accordance with the GDOT Bridge Office requirements. In addition, by using a four-span bridge instead of a three-span bridge, the additional span as outlined in Alternative B-1 would be placed in the middle of South Chickamauga Creek. There are hydraulic impacts that could occur.

The implementation of this Alternative is not recommended.

Value Engineering Alternative B-5 – Reuse existing I-75 bridges, jack and widen.

COMMENTS: According to the GDOT Bridge Maintenance Office, the existing bridge over I-75 requires a total replacement.

The implementation of this Alternative is not recommended.

Value Engineering Alternative B-6 – Reuse or rehabilitate the existing South Chickamauga Creek Bridge.

COMMENTS: According to the GDOT Bridge Maintenance Office, the existing bridge over South Chickamauga Creek requires a total replacement.

The implementation of this Alternative is not recommended.

Value Engineering Alternative B-9 – Use MSE wall abutments on the I-75 bridge in lieu of sloped paving and eliminate the two end spans.

COMMENTS: During preliminary design, the GDOT Bridge Office recommended that MSE wall abutments should not be used. The use of MSE walls would adversely impact the future widening of I-75.

The implementation of this Alternative is not recommended.

Value Engineering Alternative B-10 – Reduce the median width of the creek bridge from 20-ft. to 14-ft. to match the typical section.

COMMENTS: The 20-ft median is proposed in order to match to the future 20-ft median on SR 151, rather than the 14-ft median that would be built as a part of this project. In addition, in order to stage the construction of the bridge without closing it to traffic, while accommodating the approximate 5-ft. increase in elevation, a wide bridge must be constructed.

The implementation of this Alternative is not recommended.

CONSTRUCTION MANAGEMENT (CM):

Value Engineering Alternative CM-1 – Shift the alignment of Old Alabama Road entirely to the east and construct in two stages in lieu of four.

COMMENTS: Alternative CM-1 would involve the total re-design of SR 151. The plans were developed in accordance with the approved Revised Concept Report dated August 16, 2004. It would not be feasible to re-design the project while meeting the project schedule.

The implementation of this Alternative is not recommended.

Value Engineering Alternative CM-2 – Incorporate the Economic Price Adjustment clause into the RFP (Federal Acquisition Regulation Part 16).

COMMENTS: The Economic Price Adjustment clause will not be added to the RFP.

The implementation of this design suggestion is not recommended.

Value Engineering Alternative CM-4 – Include bridge demolition cost in the project cost estimate.

COMMENTS: The demolition costs were erroneously omitted from the cost estimate.

The implementation of this design suggestion is recommended.

Value Engineering Alternative CM-6/7 – Temporarily close Old Alabama Road at Chickamauga Creek to allow faster construction of the new bridge. Use local surface streets to detour traffic. Include bridge demolition cost in the project cost estimate.

COMMENTS: The routing of traffic off a State Route and on to local streets must be coordinated with the local government. The District Traffic Operation office does not recommend the implementation of this alternative.

The implementation of this Alternative is not recommended.